



# L5

## On-Wall Loudspeakers

### OWNER'S MANUAL

**Now Hear This**  
6400 Goodyear Road  
Benicia, CA 94510  
800-NHT-9993

# Specifications

## L5 on wall Loudspeaker

|                           |  |
|---------------------------|--|
| <b>System Type:</b>       | 3-way acoustic suspension                            |
| <b>Driver Complement:</b> | (2) 5.25" laminated cone woofers                     |
|                           | 3" paper cone midrange                               |
|                           | 1" fluid cooled aluminum dome tweeter                |
| <b>Crossover:</b>         | 450KHz, 2.4 KHz 12dB/octave high-pass                |
|                           | and 12dB/octave low-pass                             |
| <b>Response:</b>          | 65Hz - 30KHz, +/-3dB                                 |
| <b>Sensitivity:</b>       | 86dB (2.83V at 1M)                                   |
| <b>Impedance:</b>         | 6 ohms nominal                                       |
| <b>Recommended Power:</b> | 50W/ch minimum, 150W/ch maximum                      |
| <b>Inputs:</b>            | 5-way binding posts                                  |
| <b>Weight:</b>            | 18 lbs. each   |
| <b>Dimensions:</b>        | 21.8" H x 7.7" W x 5.6" D                            |
| <b>Finish:</b>            | Matte white (paintable), anthracite, silver          |
| <b>Mounting:</b>          | Integrated mounting system with<br>180 degree swivel |



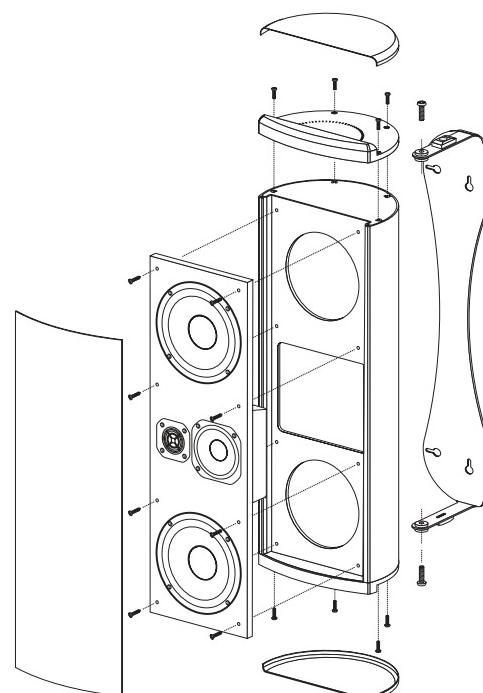
Thank you for your purchase of the NHT L5 on-wall loudspeaker. Please take a few minutes to read through this Owner's Manual prior to installing your new speakers. The information provided will help you to obtain maximum performance from your audio system. If you have questions or need assistance at any time during the installation or operation of your new speakers, please call your NHT Dealer or our Toll-Free Customer Hotline at:

**1-800-NHT-9993**

## ■ Design

NHT loudspeakers are designed to deliver refined, musical sound from attractive and affordable packages. Our efforts are guided by the study of human hearing and are optimized for real-world use. Every NHT speaker undergoes rigorous testing and quality control at the factory to ensure you years of listening pleasure.

Designed as a low-profile, wall mount surround alternative for the Evolution collection, the L5 features similar drivers as the M5 monitor housed in an aluminum extruded cabinet. Because of its low profile, the L5 is ideal for use with flat screens. Sonic performance and output capabilities match both the M5 and M6 based Evolution systems with in-room response down to 65Hz. The unique integrated mounting system is virtually hidden from view and swivels a full 180 degrees to conveniently position the speaker as needed.



## ■ Placement

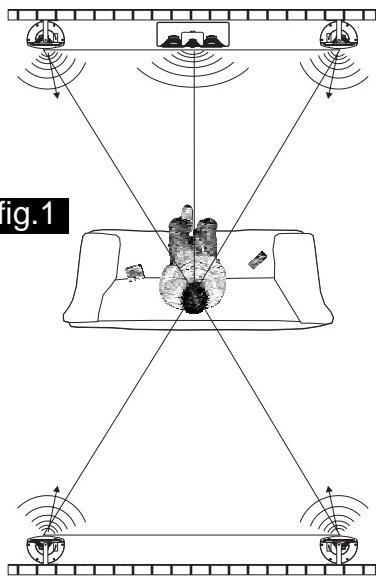
The NHT L5 on-wall loudspeaker is designed for on-wall installation into standard 2" x 4" wood studs or joists. Installation in outdoor locations or in moisture-prone interior environments such as indoor swimming pools or saunas is not recommended.

Spend some time considering speaker placement prior to installing the NHT L5 on-wall loudspeaker. Mount the speakers in a location where they face the listening area without obstruction from furniture, and preferably at least three feet from side walls. Below are some fundamental guidelines on speaker orientation:

- 1) For front left and right main speakers you do not need to "toe-in" the L5s toward the listening area (see the chapter at the end of this manual 'What is Virtual F.I.G.' for explanation); position them facing straight ahead into the room, perpendicular to the wall behind the speaker (**fig 1**).
- 2) When oriented vertically, the tweeters should be placed inward (**fig.2**).
- 3) When using the L5 for a center channel, it should be placed horizontally.
- 4) When the L5 is placed horizontally, the tweeter orientation (top or bottom) depends on the placement height. If the L5 is placed above the listener's ear, the tweeter should be below the midrange driver. If the L5 is placed below the listener's ear, the tweeter should be above the midrange driver (**fig.3**). Whatever the case, the tweeter should be as close to ear level as possible.
- 5) If you are primarily listening from a position near or against a rear wall, you can place the rear channel speakers as shown in **fig 4**. Surround processors and receivers have adjustable delay settings that allow you to equalize the arrival times at the listening position. Refer to your Surround Processor/AV Receiver manual to find the correct delay setting.
- 6) You may mount the L5 horizontally on the wall or ceiling or on a cross beam (**fig.5**).

Keep in mind that room furnishings play an important role in absorbing and reflecting soundwaves. Midrange and high frequencies in particular will be absorbed by soft furnishings such as sofas, carpets and curtains. A large number of these soft furnishings will tend to dull the sound somewhat, while a "live" room with few furnishings tends to brighten the sound.

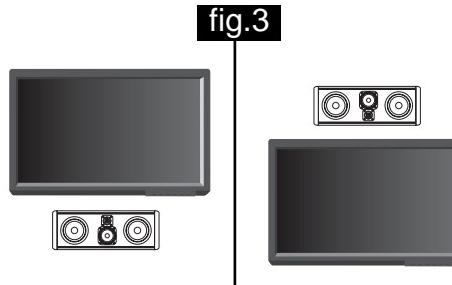
The NHT L5 on-wall loudspeaker is not magnetically shielded. Do not install them in a location where they will be within 12" of a direct view television. Unshielded magnets placed in close proximity to a television screen can cause picture discoloration and may damage the picture tube. When installing three L5 loudspeakers for front channels in a home theater system, you can position the L & R speakers farther apart to create a wider soundstage. When installing L5 loudspeakers as center channel speakers, they should be installed at least 12" directly above or below the location where the television will be.



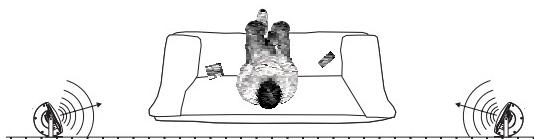
**fig.1**



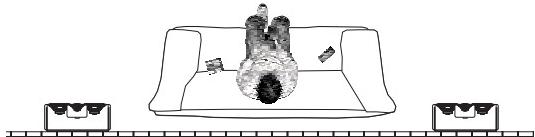
**fig.2**



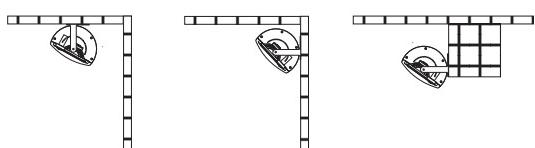
**fig.3**



**fig.4**



**fig.5**

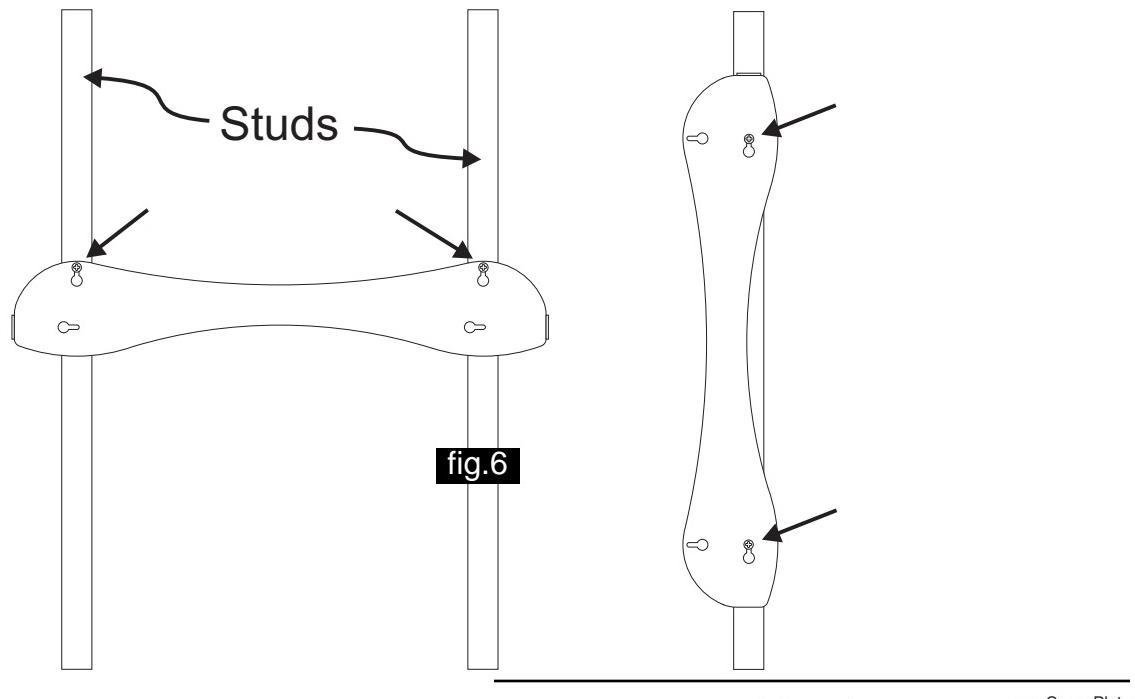


## ■ Mounting

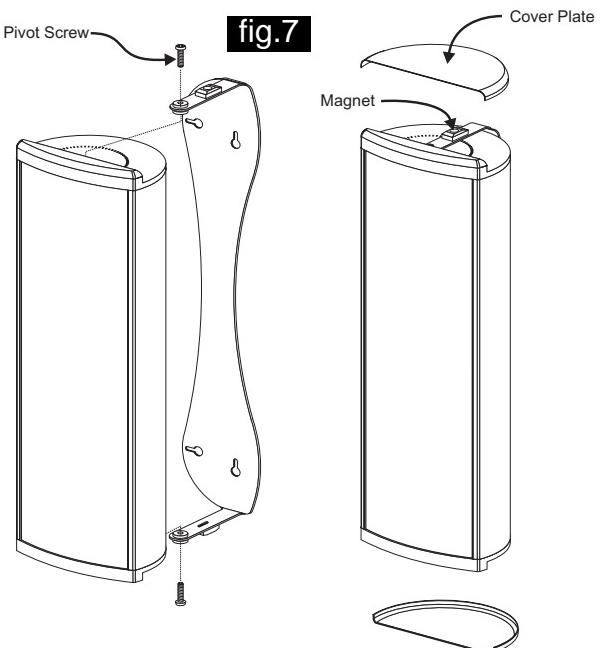
**Caution: On-wall loudspeakers should be installed by an experienced and licensed custom installation professional. Be sure that the installer possesses sufficient skill, the proper tools, knowledge of local fire and building codes, and a familiarity with the structure of the building (especially wall and/or ceiling materials, layouts, electrical and plumbing lines, etc.).**

The NHT L5 on-wall loudspeaker is designed to be conveniently mounted on a wall (or ceiling). The mounting bracket is capable of allowing the speaker to swivel a full 180 degrees.

Mounting L5 on-wall loudspeakers is fairly simple. The bracket has holes that let you mount the speaker vertically into the 2x4 studs or horizontally across studs with standard 16" centers (**fig.6**).



To mount the L5, first remove the two pivot screws holding the bracket to the speaker (**fig.7**). Remove the mounting bracket from the L5. Place the mounting bracket on the wall and mark the locations for the two screws, making sure they are going into studs. Attach the mounting bracket to the wall. Reattach the speaker to the bracket with the two pivot screws, leaving the screws slightly loose. Connect the wires to the speaker (**read the next section ‘Connections’ first**). Aim the speaker to the listening position (see placement chapter) and tighten the pivot screws. Place the cover plates onto the speaker. The cover plates will secure to the speaker via the magnets on the bracket



## ■ Connections

*Before connecting your L5 loudspeakers to your system, turn off the power to your amplifier / receiver to avoid damaging the components or the speakers.*

*If the L5 speaker is to be used with other NHT Evolution products, refer to the Evolution Owners Manual & Setup Guide for connection methods.*

First, please take a look at the five-way binding posts on the back of your speakers. They'll accept raw wire, banana plugs or spade plugs. Note that posts should be tightened by hand, since pliers can strip or break them. Next, choose your speaker wires. Like all wires, speaker wires are rated by a guage number representing how many fit in an inch-thick tube, so the numbers get smaller as the wire gets thicker. Thicker wires transmit more signal easily; we recommend 16-guage for shorter runs, and thicker for runs longer than ten feet (your authorized NHT dealer can help with wire). Equal lengths of wire for all speakers is ideal, but not absolutely necessary.

Prepare the wires by stripping 1/4" to 3/8" of insulation from the ends and, if the wire is stranded rather than solid, tightly twisting the exposed wire strands.

Finally, connect your speakers to your amplifier or receiver, connecting all conductors "in-phase;" that is, the same half of the wire-pair to the positive / red amplifier terminal and the positive /red speaker terminal. Similarly, connect black outputs and inputs. If you have trouble following which wire half is which, look closely, and you'll see that your speaker wires have some sort of marking -- lettering, ridges, or color difference -- to help.

Before powering up your amplifier or receiver, separate different kinds of cables to minimize noise. Keep speaker wires at the maximum practical distance from line-level, digital, and power cables, and if they must cross, keep them at right angles.

## ■ Operation

The NHT L5 on-wall is compatible with virtually all quality amplifiers, and are designed to handle a wide range of listening levels.

Every speaker, however, has limits, and it's important to listen for them. Speaker damage most often results not from brief loud musical peaks, but from sustained high volume levels in some or all frequencies. For this reason, extreme volume settings and excessive bass, treble or equalizer boosts are not recommended.

If you hear unusual distortion or breakup, or notice heat coming from either your woofer or tweeter, decrease volume immediately, neutralize any excess bass, treble or equalizer boosts, and avoid setting any controls to similar extremes again.

## ■ Maintenance

Your speakers require no or minimal maintenance under normal use, as long as you avoid exposing them to direct sunlight, high temperatures, or moisture. Clean cabinets, when necessary, using a damp cloth or a mild, non-abrasive cleaner; to clean grilles, remove from speaker and use a soft brush or a vacuum on its lowest setting. Do not attempt to clean the actual drivers.

## ■ Satisfaction

Your satisfaction with your new NHT L5 on-wall loudspeakers is important to us. Please note the matched products and accessories we provide for them, and your warranty, printed on the back of this manual. And again, if you have any questions regarding your speakers' use, feel free to call NHT at 1-800-NHT-9993. Enjoy your listening and viewing!



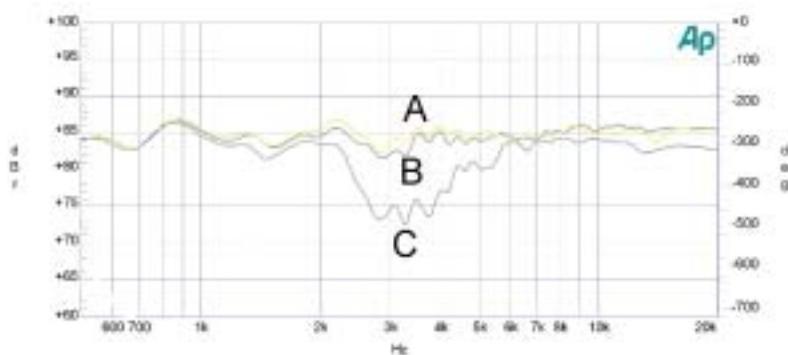
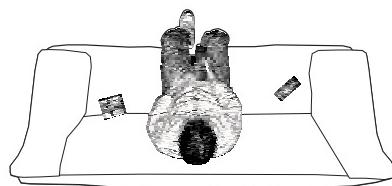
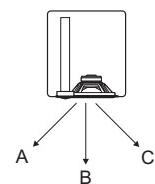
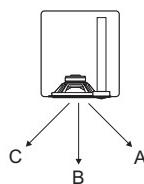
## ■ What is "Virtual" Focused Image Geometry?

NHT's hallmark for many years was technology called Focused Image Geometry (F.I.G.). This is achieved by angling the front baffle of the loudspeaker cabinet. The angled cabinet focused the mid-range and high frequencies into the listening room and away from room boundaries increasing the ratio of direct to reflected sound. This resulted in loudspeakers systems universally praised for their imaging and detail over a wide listening area.

Evolution incorporates a "virtual" adaptation of F.I.G. Rather than an angled cabinet, we increase the energy at the listening position using the crossover and driver orientation.

When Evolution monitors are oriented vertically and the tweeter is closest the inside edge of the cabinet, the null created, at the crossover frequency between the mid and high frequency drivers is directed at the sidewalls. The graph below shows the decrease in energy, aimed towards the wall (C) compared to the direct sound radiating at listening area (A & B). The reduction in reflected sound improves detail and provides a more 3-dimensional soundstage.

When oriented horizontally, the null is directed at the ceiling or floor (depending on tweeter orientation) improving mid-range detail.



## **Limited Warranty Valid Only in the U.S.A.**

### **Warranty Period**

For the period of 5 years for parts and 5 years for labor from date of original purchase (the warranty period) from an authorized NHT dealer, Now Hear This (NHT) warrants that if our product fails to function properly under normal use due to a manufacturing defect when installed and operated according to the owner's manual instructions enclosed with the unit, it will be repaired or replaced with a unit of comparable value at the option of NHT without charge to you for parts or actual repair work. Parts supplied under this warranty may be new or rebuilt at the option of NHT.

### **What's Not Covered**

This warranty does not cover any product which is used in any trade or business, or in an industrial or commercial application.

This warranty does not cover the cabinet or any appearance item, or any damage caused to the product resulting from: alterations, modifications not authorized in writing by NHT, accident, misuse or abuse, damage due to lightning or power surges, or being subjected to power in excess of the speaker's published power rating.

This warranty does not cover the cost of parts which would otherwise be provided without charge under this warranty, obtained from any source other than an authorized NHT service location. This warranty does not cover defects or damage caused by the use of unauthorized parts or labor or from improper maintenance.

**Altered, defaced or removed serial numbers void this warranty.**

### **Your Rights**

The liability of NHT will be limited to the purchase price of the product, and NHT will not be liable for incidental or consequential damages. NHT limits its obligations under any implied warranties under state laws to a period not exceeding the warranty period. Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion or limitation of incidental or consequential damages. The above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

### **To Obtain Service**

To find the name and address of the nearest authorized NHT service location, call or write: **Customer Service Department, NHT, 6400 Goodyear Rd., Benicia, CA 94510, 1-800-NHT-9993 (648-9993), [www.nhthifi.com](http://www.nhthifi.com)**

**Keep this warranty with your sales receipt. Record date and place of purchase for future reference.**